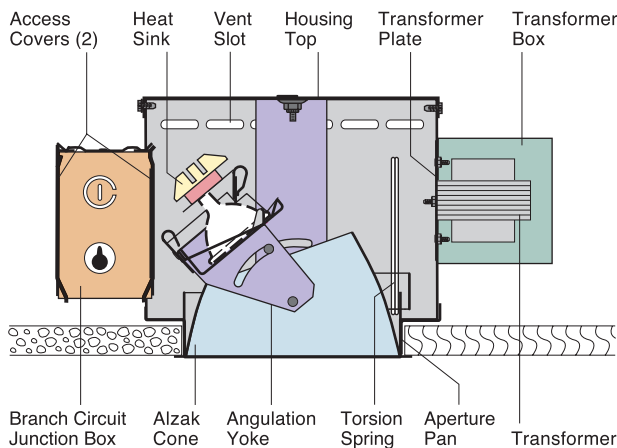


K7430



K7431

**K7430** 4 1/8" Conoid Aperture  
**K7431** 5 7/8" Conoid Aperture

**Directionals**  
**MR-16 Low Voltage Lamps**

**Optics and Applications**

The parabolic cone provides shielding and brightness control in directional applications and for vertical downlighting in sloped ceilings. The broad selection of MR-16 lamps offers beam spreads from 7° to 40°, ideal for highlighting merchandise, art objects and points of interest.

**Design Features**

The lampholder assembly rotates 360°. Angulation to 45° on K7430, to 40° on K7431. Rotation and angulation locks assure permanent positioning. The cone rotates with lamp aiming for constant alignment. The lampholder assembly has a pronged aluminum heat sink and a reflective shield to divert heat from the bi-pin socket. The entire hinged assembly drops for relamping. Stainless steel springs hold the lamp firmly in position. Maximum ceiling thickness 7/8". Top or bottom service.

**Finish**

A specular clear Alzak cone is standard. Optional colors and Softglow® finishes are available. Housing and structural parts are painted optical matte black to suppress stray light leaks. Steel parts are phosphate conditioned for corrosion resistance before painting.

**Transformer**

Each fixture has a transformer capable of accommodating MR-16 lamps up to 75W. The primary lead is 120V with a 12V secondary. The transformer is rated 180°C, Class H with a built-in 150°C thermal reset. It can be lowered through the aperture for service. Maximum fixture draw is 85W.

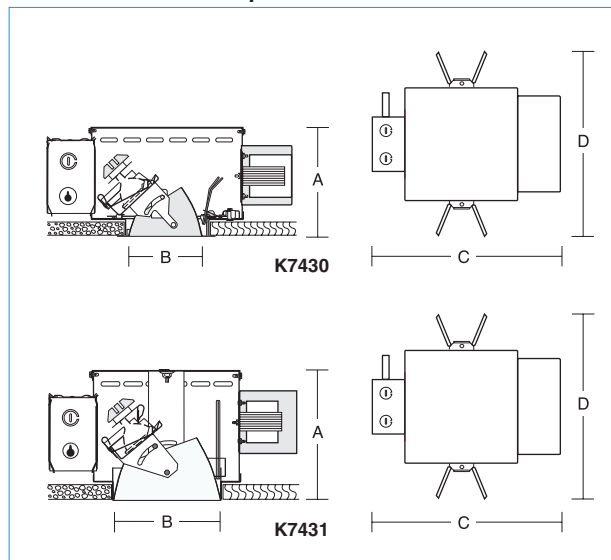
**General**

Fixtures are pre-wired and thermally protected, UL and C-UL listed for eight wire 75°C branch circuit wiring. Union made IBEW. Luminaire Efficiency Ratings (LER) do not apply to low voltage fixtures.

**Accessories**

- B Black cone.
  - G Gold cone.
  - H Mocha cone.
  - P Graphite cone.
  - T Titanium cone.
  - W Wheat cone.
  - Y Pewter cone.
  - Z Bronze cone.
  - S Softglow® finishes: add S before color letters. e.g. SW for Softglow® wheat cone, SC for Softglow® clear cone.
  - FR Frosted lens. Example: LLFR for linear lens frosted.
  - STC Straight top cone.
  - TAL Turn and Lock socket.
  - V277 277 volt primary transformer.
  - AR70 Aluminum reflector lamp. Add 1/2" to depth.
  - WRL Wattage restriction label, specify wattage.
- For color filters, pattern control lenses, light block screens, UV filters and other accessories, contact the factory.

**Dimensions and Lamps**



Number	A Depth	B Aperture	C Width	D Length	Lamps
K7430	6" 153mm	4 1/8" 105mm	14 1/4" 362mm	14 1/4" 362mm	20-75W MR-16 Low voltage
K7431	7 1/2" 191mm	5 7/8" 149mm	14 1/4" 362mm	14 1/4" 362mm	20-75W MR-16 Low voltage

**Matching Units**

- Straight downlights [Pages K2, C1, C2, C6, C7, C8, C9](#)
- Wall washers [Pages K4, E1, E4, E5, E6, E7, E8](#)
- Directionals [Pages K5, K6, C21, C22, C23](#)

\* Click for link to pages in blue.

# K3 K7430 K7431

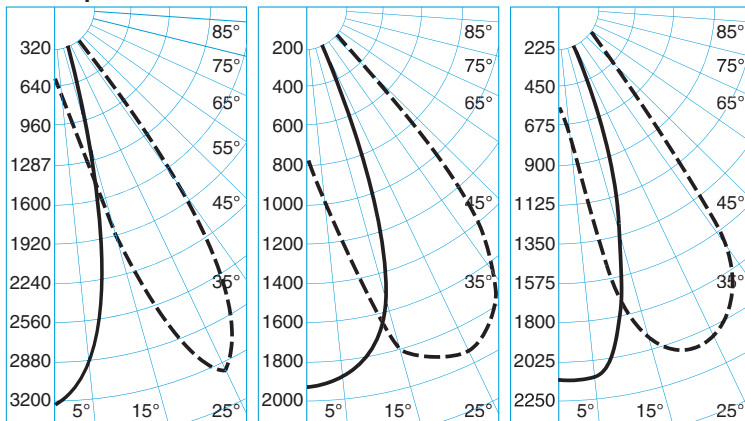
## Footcandle Values

Distance	5'			10'			15'			20'										
	Nadir	10°	15°	Nadir	10°	15°	Nadir	10°	15°	Nadir	10°	15°								
Lamps, MR-16	FC	FC	Diam	FC	FC	Diam	FC	FC	Diam	FC	FC	Diam	FC	FC	Diam					
K7430 50W NFL/EXZ 25°	126	76	2'	40	3'	32	19	4'	10	5'	14	8	5'	4	8'	8	5	7'	3	11'
K7430 75W FL/EYC 40°	77	69	2'	55	3'	19	17	4'	14	5'	9	8	5'	6	8'	5	4	7'	3	11'
K7431 50W NFL/EXZ 25°	132	80	2'	42	3'	33	20	4'	10	5'	15	9	5'	5	8'	8	5	7'	3	11'
K7431 75W FL/EYC 40°	84	71	2'	47	3'	21	18	4'	12	5'	9	8	5'	5	8'	5	4	7'	3	11'

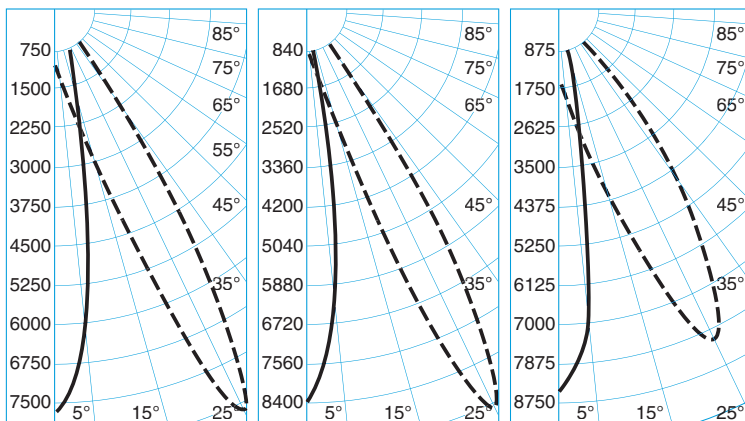
Distance	5'			10'			15'			20'										
	Nadir	5°	10°	Nadir	5°	10°	Nadir	5°	10°	Nadir	5°	10°								
Lamps, MR-16	FC	FC	Diam	FC	FC	Diam	FC	FC	Diam	FC	FC	Diam								
K7430 50W NSP/EXT 15°	310	238	1'	109	2'	78	60	2'	27	4'	34	26	3'	12	5'	19	15	3'	7	7'
K7430 75W NSP/EYF 15°	336	232	1'	93	2'	84	58	2'	23	4'	37	26	3'	10	5'	21	15	3'	6	7'
K7431 50W NSP/EXT 15°	318	300	1'	89	2'	80	75	2'	22	4'	35	33	3'	10	5'	20	19	3'	6	7'
K7431 75W NSP/EYF 15°	336	279	1'	69	2'	84	70	2'	17	4'	37	31	3'	8	5'	21	17	3'	4	7'

See note 4.

## Candlepower Distribution



K7430 50W MR-16 EXZ 25° Eff. 76% S/M .41  
 K7430 75W MR-16 EYC 40° Eff. 64% S/M .66  
 K7431 75W MR-16 EYC 40° Eff. 58% S/M .57



K7430 50W MR-16 EXT 15° Eff. 93% S/M .28  
 K7430 75W MR-16 EYF 15° Eff. 95% S/M .25  
 K7431 75W MR-16 EYF 15° Eff. 99% S/M .27

## Brightness

Number	Lamps, MR-16	85°	75°	65°	55°	45°
K7430	50W NFL/EXZ 25°	5	27	41	76	145
	75W FL/EYC 40°	9	35	60	105	199
K7431	75W FL/EYC 40°	6	13	26	71	254

## Candelas

o	K7430	K7430	K7431
	884*	1202*	1202*
0	3162	1930	2100
5	2860	1814	2100
10	1982	1804	1860
15	1121	1515	1300
20	509	955	720
25	212	357	280
30	82	58	70
35	9	10	10
40	0	0	0
45	0	0	0
50	0	0	0
55	0	0	0
60	0	0	0
65	0	0	0
70	0	0	0
75	0	0	0
80	0	0	0
85	0	0	0
90	0	0	0

o Vertical Angles  
 \* Initial Lamp Lumens

o	K7430	K7430	K7431
	889*	650*	650*
0	7752	8390	8400
5	6027	5868	7050
10	2865	2425	1800
15	917	340	450
20	305	24	100
25	115	0	0
30	21	0	0
35	0	0	0
40	0	0	0
45	0	0	0
50	0	0	0
55	0	0	0
60	0	0	0
65	0	0	0
70	0	0	0
75	0	0	0
80	0	0	0
85	0	0	0
90	0	0	0

o Vertical Angles  
 \* Initial Lamp Lumens

## Notes

- Data with clear specular cones.
- Colored cone multipliers vary with lamp source, beam orientation, and degree of angulation. Contact the factory for specific data.
- Candlepower distribution curves: solid lines show horizontal distribution at nadir, dotted lines show horizontal distribution at 25° lamp tilt.
- Pattern diameters are determined from each side of nadir with 0° lamp tilt. The diameter includes both sides, so a 10° diameter represents a total 20° pattern width at the work plane. Footcandles are measured at the diameter edge. Tilting the lamp changes all data.
- Average Luminance Method brightness data are inaccurate for downlights. They are calculations created for troffers. We recommend the stricter standard of Maximum Brightness Method point data from direct meter readings. They approximate what the human eye perceives when evaluating glare. Further discussion in Z section brochure Z1.

Data in footlamberts. Photometer readings, Maximum Brightness Method. See note 5. Data collected with lamps tilted 25°.